

## Completed Pollution Prevention Project Case Study

United States Department of Energy  
Office of Environmental Management  
Fact Sheet

### Fiber-Optic Distribution TA-9 to TA-15 Los Alamos National Laboratory

#### Original Problem

LANL wanted to run a fiber-optic cable between TA-9 and TA-15 to give these sites much faster access to the LANL network. A new 14,000 foot long trench was going to be created to house the high speed data transmission line and its flexible innerduct shielding. The original project was estimated to cost \$334,000 and require 12 weeks to complete.

#### The Project Solution

By examining an underground map, Rick Beare discovered an abandoned 2 inch pipeline between the affected sites. Ownership of the pipeline was transferred to CIC-4 at no cost, and new plans were made to run the innerduct and the fiber-optic cable through the pipeline instead of digging a new trench. The revised project should only take 6 weeks to complete.

#### Value of Improvement

Approximately \$150,000 were saved by avoiding the equipment rental and labor costs associated with the construction of a new trench. The environmental benefits of not digging the trench include reduced soil erosion and air pollution. Housing the fiber-optic cable in the pipeline instead of just a trench gives the cable better protection. The project can be completed in about half the time originally scheduled.

#### Lifecycle Waste Reduction

Lifecycle Waste Reduction	NA
Operation Commencement Date	2000
Project Useful Life (Years)	Indefinite



#### DOE Monetary Benefits

Total Project Cost	NA
Lifecycle Savings	\$150,000
Return on Investment	NA

#### Benefits At-A-Glance

- Reduces environmental disturbance such as soil erosion, noise, and air pollution.
- Saves time and reduces the costs of labor and equipment rental.
- Affords better protection for the fiber-optic cable.

**Fiber-Optic Distribution TA-9 to TA-15**  
**Los Alamos National Laboratory**

	<b>Summary Data</b>
Priority Area:	Financial Management Projects
Project Type:	Cost Reduction
Total Project Cost:	NA
Lifecycle Savings:	\$150,000 for this project
Implementing Group:	CIC-4
Benefiting Group:	CIC-4
Useful Life Years:	Indefinite
Return on Investment:	NA
Lifecycle Waste Reduction:	NA
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